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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Abraham I. Zeigler  
Serial No. : 09/401,875  
Filed : September 23, 1999  
Title : MONTAGE FOR AUTOMATED MARKET SYSTEM  
Art Unit : 3624  
Examiner : Campen, Kelly Scaggs

**Mail Stop Appeal Brief - Patents**

Commissioner for Patents  
P.O. Box 1450  
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**BRIEF ON APPEAL (CORRECTED)**

The brief fee of \$330 has already been paid. Please apply any other charges or credits to Deposit Account No. 06-1050.

This Brief is a corrected Brief which addresses the examiner's denial of entry of a Reply pursuant to 37 C.F.R. 1.116(b) that accompanied Appellant's prior Brief.

**CERTIFICATE OF MAILING BY FIRST CLASS MAIL**

I hereby certify under 37 CFR §1.8(a) that this correspondence is being deposited with the United States Postal Service as first class mail with sufficient postage on the date indicated below and is addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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### **Real Party In Interest**

The real party in interest in the above application is The Nasdaq Stock Market, Inc., a corporation existing by virtue of laws of the State of Delaware.

### **Related Appeals and Interferences**

The appellant is not aware of any appeals or interferences related to the above-identified patent application.

### **Status of Claims**

This is an appeal from the decision of the Primary Examiner in an office action dated September 23, 2003, finally rejecting claims 1-23. Claims 23-41 were subjected to a restriction under 35 U.S.C. § 121.

Claim 1-23 were rejected under 35 U.S.C. 112 second paragraph as being indefinite. Claims 1-23 were rejected under 35 U.S.C. § 102 (b) as anticipated by Gutterman et al., U.S. Patent 5,297,031 (Gutterman). Appellant filed a Notice of Appeal on March 23, 2004.

### **Status of Amendments**

This Brief is accompanied by an Amendment under 37 CFR 1.116(b), which addresses a restriction requirement and cancels claims 24-41. Entry of this amendment is pending before the examiner. The Appendix of claims attached to this Brief reflects entry of the amendment. All previously filed amendments have been entered.

### **Summary of the Invention**

#### **Background**

This invention relates to order entry and display in electronic markets.

One example of an electronic market is The Nasdaq Stock Market. The Nasdaq Stock Market uses multiple entities referred to as market makers that are independent dealers that compete for investors' orders. Changes in order handling rules have required market makers to

display limit orders from electronic communication networks. (*Appellant's specification page 1, lines 1-11*).

### Appellant's Invention

According to an aspect of the invention a method of managing quotes for a security includes receiving from a market participant additional aggregate quotes having a size, the additional aggregate quotes being quotes that are displayable as trading interest in a security, but not being attributable to any market participant. (Appellant's specification on page 1, lines 13-15).

According to an additional aspect of the invention, an electronic market for trading of securities includes a plurality of client stations. The plurality of client stations are used to enter quotes for securities. The quotes specify a price level and a quote size. The quotes include quotes that are displayable and attributable to a specific market participant or are additional aggregate quotes that are displayable but not attributable to a specific market participant. A server receives the quotes from the client stations, aggregates the quotes and causes totals of aggregate quotes for a plurality of price levels to be displayed on the client systems. (Appellant's specification on page 1, lines 16-21).

According to an additional aspect of the invention, a client station for entering quotes includes a display rendering a graphical user interface at which quotes can be entered at a price level. The interface includes controls to enter a quote having a size, the quote being displayable and attributable to a specific market participant, a reserve quote, having a size, the reserve quote being neither displayable nor attributable to a specific market participant, and an additional aggregate quote, having a size that is displayable but not attributable to a specific market participant. (Appellant's specification on page 1, lines 22 to page 2, line 1).

According to an additional aspect of the invention, a graphical user interface includes an aggregation window which displays additional aggregate quotes for a plurality of price levels of a product traded in the market, the aggregate quotes including quotes that are attributable to market participants and quotes that are displayable quotes but are not attributable to any market participants. (Appellant's specification on page 2, lines 2-6).

Features of the invention improve market transparency and reduce market fragmentation that can occur with multiple, competing, market centers. Features of the invention can enhance the collection, aggregation and display of pre-trade information enabling fast, efficient, low-cost access to liquidity. Aggregating of pre-trade information from various market venues and displaying the information in a manner that adds depth to the market place, complies with order handling rules, and minimizes disclosure of identity of trading interest which should encourage greater quote and order display. The arrangement also preserves the ability of market makers to advertise quotes to promote negotiated transactions. The execution system, thus, enhances collection of pre-trade information, aggregation of pre-trade information, and display of pre-trade information, while improving access to liquidity through execution systems. (Appellant's specification on page 2, lines 9-26).

#### References to the Specification

Referring to FIG. 1, an electronic market 10 is shown. The electronic market includes client systems 12 that access an electronic market system 20. The client systems 12 can be broker/dealer systems 12a, electronic communication networks (ECNs) 12b, market-maker systems 12c, and a connection with other exchanges 12d. (Appellant's specification on page 3, lines 11-30)

A process 40 collects pre-trade information, in the form of quotes or orders. The distinction between a quote and an order depends on several factors. For example, a market maker can send a proprietary quote, i.e., a quote that represents its own trading interest or an agency quote that represents interest of a market maker sponsored entity. If one proprietary quote is sent it could be considered one order. If one agency quote is sent it also could be considered one order. If an agency quote reflects an aggregation of more than one agency order, however, the aggregate agency order could be considered a quote. Entry of quotes is limited to registered market makers 12b and ECNs 12c. For any given stock, a registered market maker or ECN may directly enter a non-marketable order into the market system 20 on behalf of its customer, or it may sponsor the direct entry of an order by its customer. All sponsored quotes are sent to the market system 20 under the name of the sponsoring market maker or ECN. (Appellant's specification on page 3, line 31 to page 4, line 18)

Quotes submitted to the system can include a quote size, additional aggregate size and a reserve size. Additional aggregate size is size (in addition to Quote Size) that the market maker or ECN wishes to display to the marketplace through an aggregate display in a top-half of the order display window 70. This size is not attributable to the market maker or ECN until it is executed. Reserve size is size that is never displayed to the marketplace but that is immediately accessible through the order display window 70. In order to utilize Reserve Size, a market maker can be required to have a minimum amount displayed in the aggregate of quote size and aggregate size. A quote size is a displayable quote that can require an order to be delivered for negotiation before moving on to the next price level. (Appellant's specification on page 4, line 19 to page 5, line 3)

Referring now to FIG. 2, the order display and execution process 40 receives 42 quotes from the various sources mentioned above. The order entry process 40 compares 44 the received quotes to existing quotes to determine 46 whether the quotes correspond to current pre-defined quote levels 47. If the quote is within one of the current quote levels 47, the process 40 determines 48 new marketable quote sizes by adding the quote size corresponding to the received quote, to quote sizes at that price level already in the market system 20. The process 40 will display 50 the new marketable quote sizes. The order display and execution process 40 is an ongoing process that continually receives quotes and adjusts displayable price levels based upon new prices received in the quotes. If a received quote does not have a price that corresponds to an existing price level, the process 40 will store 52 the quote at a new price level and will determine 54 whether a new price level should be displayed. If a new price level should be displayed, the process 40 will change 56 current price levels and display quotes at the new current price levels. (Appellant's specification on page 5, lines 10-30)

Referring now to FIG. 3A, an alternative order entry process 40' is shown. The order entry process 40' receives 42 quotes from the various sources mentioned above. The order entry process 40' determines 43 whether the received quote corresponds to a reserve quote. If the quote does not correspond to a reserve quote then the quote is either a marketable quote or an additional aggregate quote. The order entry process 40' compares 44 the received quotes to existing quotes to determine 46 whether the quotes correspond to pre-defined quote levels which,

for this example, will correspond to one of three price levels that are displayable. (Appellant's specification on page 5, line 31 to page 6, line 14)

Referring to FIG. 3B, the process 50 to display the marketable quote will determine 60 whether the quote is an additional aggregate quote or a displayable marketable quote. If it is a displayable marketable quote 62, the quote will be displayed 64 in the advertising or current quote portion 74 at the bottom of the window 70. Otherwise, the quote will be considered to be an additional aggregate quote. The additional aggregate quote is added 66 to existing marketable quotes i.e., additional aggregate quotes and displayable quotes. The additional aggregate is also added to existing aggregate quotes for the particular entity that entered the quote. The additional aggregate quote is not attributed to the entity that entered it. However, the system causes the quote to be displayed in the aggregate portion 72 of the window 70. (Appellant's specification on page 6, line 21 to page 7, line 2)

Referring now to FIG. 4, an order display graphical user interface (GUI) 70 is shown. In this embodiment, the order display GUI 70 includes two regions. A first region 72 displays aggregated bids and offers and includes a first line 72a to display the price levels for best bid and best offer along with quote sizes. The quotes sizes are the total aggregate number of displayable shares 75, 77 and aggregate agency shares 76, 78. The top-half 72 of the window 74 also includes lines 72b and 72c that display the same information for the next two best bids and best offers, (i.e., next two ticks). In this embodiment, the window 70 includes separate fields that specify the number of agency shares at each price level. Aggregating agency interest can be considered as exposing natural interest i.e., from participants other than market maker professionals, prior to accessing proprietary quotes. (Appellant's specification on page 7, line 15 to page 8, line 1)

### **Issues**

The issues to be decided on appeal are:

1. Did the Examiner properly reject claims 1-23 under 35 U.S.C. 112 second paragraph as being indefinite?
2. Did the Examiner properly reject claims 1-23 under 35 U.S.C. 102(b), as being anticipated by Gutterman et al., U.S. Patent 5,297,031 (Gutterman)?

### **Grouping of Claims**

Claims 1-23 do not stand or fall together. Appellant's claims will be argued in separate groupings as defined below.

Group I has claims 1 and 10;

Group II has claims 2 and 11;

Group III is claim 3;

Group IV has claims 4-7 each argued individually;

Group V has claims 8 and 9;

Group VI has claim 12;

Group VII is claims 13, 14, and 17;

Group VIII is claim 15;

Group IX has claim 18 and 19; and

Group X has claims 20-23.

### **Argument**

1. The Examiner has failed to show that claims 1-23 are incomplete within the meaning of 35 U.S.C. 112, second paragraph.

2. The Examiner has failed to establish a case of prima facie anticipation under 35 U.S.C. 102(b) of claims 1-23 as being anticipated by Guttermann et al.

### **Indefiniteness**

The second paragraph of 35 U.S.C. §112 second paragraph requires that the specification conclude with one or more claims that particularly point out and distinctly claim the subject matter that the applicant regards as his invention.

It is not necessary for the claims to recite every element needed for practical utilization of the claimed subject matter in order for a claim to be proper under 35 U.S.C. §112, second paragraph, *Bendix Corp. v. United States*, 600 F.2d 1364, 1369, 204 U.S.P.Q. 617, 621 (Court of Claims, 1979) and *Miles Laboratories, Inc. v. Shandon, Inc.*, 997 F.2d 870, 27 U.S.P.Q. 2d, 1123 (Federal circuit, 1993). It is not the role of the claims to enable one skilled in the art to reproduce the invention, but rather to define the legal metes and bounds of the invention. In re

Geoffe, 526 F.2d 1393, 1397, 188 U.S.P.Q. 131, (CCPA, 1975). The claims need not provide all operating details but a method claim should recite a positive step. In re Erlich, 3 U.S.P.Q. 2d 1011 (Bd. Pat. App. & Int., 1986).

### Anticipation

"It is well settled that anticipation under 35 U.S.C. §102 requires the presence in a single reference of all of the elements of a claimed invention." *Ex parte Chopra*, 229 U.S.P.Q. 230, 231 (BPA&I 1985) and cases cited.

"Anticipation requires the presence in a single prior art disclosure of all elements of a claimed invention arranged as in the claim." *Connell v. Sears, Roebuck & Co.*, 220 U.S.P.Q. 193, 198 (Fed. Cir. 1983).

"This court has repeatedly stated that the defense of lack of novelty (i.e., 'anticipation') can only be established by a single prior art reference which discloses each and every element of the claimed invention." *Structural Rubber Prod. Co. v. Park Rubber Co.*, 223 U.S.P.Q. 1264, 1270 (Fed. Cir. 1984), citing five prior Federal Circuit decisions since 1983 including *Connell*.

In a later analogous case the Court of Appeals for the Federal Circuit again applied this rule in reversing a denial of a motion for judgment n.o.v. after a jury finding that claims were anticipated. *Jamesbury Corp. v. Litton Industrial Prod., Inc.*, 225 U.S.P.Q. 253 (Fed. Cir. 1985).

After quoting from *Connell*, "Anticipation requires the presence in a single prior art disclosure of all elements of a claimed invention arranged as in the claim," 225 U.S.P.Q. at 256, the court observed that the patentee accomplished a constant tight contact in a ball valve by a lip on the seal or ring which interferes with the placement of the ball. The lip protruded into the area where the ball will be placed and was thus deflected after the ball was assembled into the valve. Because of this constant pressure, the patented valve was described as providing a particularly good seal when regulating a low pressure stream. The court quoted with approval from a 1967 Court of Claims decision adopting the opinion of then Commissioner and later Judge Donald E. Lane:

[T]he term "engaging the ball" recited in claims 7 and 8 means that the lip contacts the ball with sufficient force to provide a fluid tight seal \*\*\*\* The Saunders flange or lip only sealingly engages the ball 1 on the



upstream side when the fluid pressure forces the lip against the ball and never sealingly engages the ball on the downstream side because there is no fluid pressure there to force the lip against the ball. The Saunders sealing ring provides a compression type of seal which depends upon the ball pressing into the material of the ring. \*\*\* The seal of Saunders depends primarily on the contact between the ball and the body of the sealing ring, and the flange or lip sealingly contacts the ball on the upstream side when the fluid pressure increases. 225 U.S.P.Q. at 258.

Relying on *Jamesbury*, the ITC said, "Anticipation requires looking at a reference, and comparing the disclosure of the reference with the claims of the patent in suit. A claimed device is anticipated if a single prior art reference discloses all the elements of the claimed invention as arranged in the claim." *In re Certain Floppy Disk Drives and Components Thereof*, 227 U.S.P.Q. 982, 985 (U.S. ITC 1985).

## Discussion

### 35 U.S.C. 112 Rejections

The examiner rejected claims 1-23 under 35 U.S.C. 112 as being incomplete. The examiner stated in the office action dated May 5, 2003, "the preamble is directed to a method of managing quotes yet there are no managing steps." The applicant disagrees.

Claim 1 includes "receiving from a market participant additional aggregate quotes having a size, the additional aggregate quotes being quotes that are displayable as trading interest in a security, but not being attributable to any market participant." The action of receiving from a market participant additional aggregate quotes having a size is one of a plurality of steps performed in managing quotes. This is the step that applicant relies upon for patentability. As discussed in *Moleculon* not all steps or elements of a process or apparatus need to be included in the claim. "When used as a transitional phrase, the word "comprising" is a term of art and means that the claim does not exclude additional, unrecited elements" *Moleculon Research Corp. v. CBS, Inc.*, 229 U.S.P.Q. 805, 1261 (Fed. Cir. 1987). Moreover, it is the function of the claims to

point out what is new and non-obvious not what is necessary to make an operable embodiment of the claim (see *Miles Laboratories, Inc. v. Shandon, Inc.*, 997 F.2d 870, 27 U.S.P.Q. 2d, 1123 (Federal circuit, 1993)). Appellant therefore contends that claim 1 is proper since it particularly points out and distinctly claims the subject matter that the Appellant regards as his invention.

Appellant had filed an amendment pursuant to 37 C.F.R. 1.116 (b) along with this brief to have the examiner enter amendments that correct minor antecedent basis issues with claims 13 and 14 and to clarify where the graphical user interface is displayed in claim 15. This amendment was denied entry by the examiner.

Claim 13 recites a server process that receives the quotes from the clients, aggregates the quotes and causes totals of aggregate quotes for a plurality of price levels to be displayed on the client systems. One of ordinary skill in the art would understand that a server process, is a computer implemented process in the sense of client-server, where the server process, performs functions or services for requesting clients.

As to claim 14, it is clear that the claim can include quotes that are reserve quotes that are neither displayable nor attributable to a specific market participant. Claim 15, it is clear to one of skill in the art that the aggregated quotes are displayed in a graphical user interface that includes an aggregate montage for displaying aggregate quotes at multiple price levels on either side of the market.

### **Prior Art Rejections**

Appellant provides a system that allows certain types of interest (e.g., non-attributable interest) to be hidden yet displayed to the market. Non-attributable interest is interest, e.g., quotes and or orders that cannot be attributed to a particular market participant. The non-attributable interest is displayed in an aggregate montage as part of the aggregated quotes. This satisfies regulations for displaying of an order, but also enables the identity, extent, and indeed existence of the quote to be concealed. The appellant also provides a "special identifier" to identify aggregated non-attributable interest in the current quote window. The special identifier represents a total aggregate of non-attributable quotes at a particular price level.

Group I (claims 1 and 10)

Appellant's claim 1 is representative of this group. Claim 1 is directed to a method of managing quotes for a security. Appellant's claimed method includes receiving from a market participant additional aggregate quotes having a size, the additional aggregate quotes being quotes that are displayable as trading interest in a security, but not being attributable to any market participant. Gutterman does not anticipate claim 1.

The Examiner contends that Gutterman anticipated this claim and disclosed "a method of managing quotes for a security." (Office action dated May 8, 2003) The examiner contends that the abstract of the Gutterman reference has all of the features that anticipate claim 1, The examiner does not address each and every element of claim 1. For example, the examiner does not address the "aggregate quotes having a size" or that these quotes are "displayable as trading interest in a security, but are not attributable to any market participant." Appellant is unable to find any corresponding teachings in Gutterman. Therefore, Gutterman is not an anticipating reference under 35 U.S.C. 102(b) since it does not contain every feature of the claimed invention.

Appellant contends that Gutterman does not teach "managing quotes for a security" as in appellant's claim 1 because Gutterman does not discuss quotes. As shown in Fig. 2b, and as taught by Gutterman "it is advantageous to show buy orders in blue and sell orders in red" (col. 11, lines 41-44). Gutterman displays "the total number of orders at each price level" (col. 10, lines 39-47). According to Gutterman, what is displayed is the total number of orders. Gutterman does not suggest to modify the system to handle quotes along with orders.

As shown in FIG. 2a-d of Gutterman, the incoming orders pane 120 includes selected information about each of the orders.

"The selected information about each incoming order (seven of which are shown in the figure) includes the quantity (shown in the QTY column), price (\$ column), contract and month code (CT column), order type (T column), sending commission house or firm (FIRM column) and the total number of contracts at that price for all incoming orders (TOT column)" (col. 10, lines 39-46).

Gutterman's system includes a feature to "present any information about the selected order that was available to the order entry system but not displayed" (col. 14, lines 19-21). Since the firm or broker information is available to the order entry system, the user could view this

information even if it were not displayed. Thus, orders whether considered as equivalent or not to quotes, are always displayable in Gutterman and thus are also attributable. Inherently Gutterman does not teach displayable and non-attributable interest, as in appellant's claim 1.

In addition, Gutterman "provides the minimum amount of information believed necessary for the broker to decide whether to accept or reject an order" (col. 14, lines 6-10) and the displayed information includes the house or firm, (col. 10, line 44 and col. 11, lines 34-36). Gutterman, therefore, does not describe displaying additional quotes that are no attributable to any market participant. Thus, Gutterman cannot be an anticipating reference under 35 U.S.C. 102(e) since it does not contain every feature of the claimed invention.

#### Group II (claims 2 and 11)

Claim 2 represents this group. Claim 2 depends from claim 1 and further distinguishes the invention over Gutterman. Claim 2 calls for receiving quotes from market participants that are displayable quotes and attributable to corresponding ones of the market participants. Claim 2 in combination with claim 1 clearly requires two distinction actions of receiving, that is receiving displayable, attributable quotes and receiving displayable non-attributable quotes.

Gutterman describes the orders received in col. 11, lines 23-36 as follows:

As described above, the incoming orders pane 120 displays information describing orders that have been communicated to the broker workstation via an electronic order entry system ... the information on each incoming order is presented in a one-line format, including the order's type (e.g., market (K), stop (S), limit (L), stop/limit (/) or M.I.T. (M)), the quantity ordered, the commodity or instrument (e.g., USZ can refer to U.S. Treasury bonds having a December maturity), the price and an identification number of the commission house or other trader placing the order. (emphasis added)

Since Gutterman displays the identification number of the commission house or other trader placing the order for "each incoming order," Gutterman describes receiving displayable, attributable orders. Gutterman does not describe receiving a second, different type of order/quote. Thus, Gutterman does not teach the combination of receiving displayable non-attributable quotes and receiving displayable, attributable quotes. Accordingly claim 2 serves to further distinguish from Gutterman.

Group III (claim 3)

Appellant's claim 3 is representative of this group. Claim 3 is directed to "receiving quotes that are reserve quotes, which are neither displayable quotes nor attributable to market participants, but are available as trading liquidity in the security." Gutterman does not anticipate claim 3.

Gutterman does not describe quotes that are "neither displayable quotes nor attributable." The examiner merely stated in rejecting this claim that: "Specifically as to claims 2-12, see above rejection for claim 1, in addition see figures 1-3a, and columns 5-14." No reference or reason for the rejection of claim 3 is given by the examiner related to the particular subject matter of claim 3.

Appellant cannot find in figures 1-3a, and columns 5-14 any teachings directed to reserve interest. Thus, claim 3 when taken in combination with claim 1 further limits claim 1 and serves to distinguish claim 3 over Gutterman, since Gutterman does not suggest including an additional reserve quote.

Group IV (claims 4, 5, 6, and 7)

Each of the claims in this group defines distinct subject matter over Gutterman. Claim 4 is directed to "determining total aggregate quote size." Claim 5 further defines determining total aggregate quote size to include "determining the total aggregate quote sizes by adding received quotes and additional aggregate quotes received for the security at corresponding price levels to provide the total aggregate quote sizes at each of the corresponding price levels and displaying the attributable quotes in an advertisement portion of a quote montage."

Neither the features of claim 4 nor the features of claim 5 are anticipated by Gutterman.

As shown in FIG. 2B, Gutterman includes a total column (e.g., totals 133), however, this pane displays a total number of orders at or below a particular price according to the time the orders are received (col. 12, lines 49-51). As can be determined by the displayed totals, the totals are simply a sum of each of the displayed orders. Gutterman does not provide any further teachings that would indicate that any other order additional types exist in Gutterman that would be used to arrive at the displayed totals.

For example, as shown in FIG. 2B, at the price level of 29 there are two orders one for 10 and one for 30 and the displayed total is 40 (i.e.,  $10 + 30$ ). For the price level of 30 there are two orders: one for 25 and one for 5 and the displayed total is 70 (i.e.,  $10 + 30 + 25 + 5$ ). For the price level of 31 there is one order for 30 and the displayed total is 100 (i.e.,  $10 + 30 + 25 + 5 + 30$ ). Thus, Gutterman seems to only total what is actually displayed in the pane, and whether or not additional orders are in the system, they would not seem to be totaled unless displayed in the pane. Moreover, Gutterman does not provide any indication of additional aggregate quotes included in the aggregation that are available as trading liquidity in the security but are neither displayable nor attributable.

Even if Gutterman were to aggregate quotes of these two differing types, Gutterman still would not teach each and every feature of claim 5. Claim 5 includes aggregating the quotes to "provide the total aggregate quote sizes at each of the corresponding price levels." Gutterman totals the number of orders at or below a price level. Thus, a user would not be able to readily view the total at each of the corresponding price levels as in the appellant's claim 5.

Claim 7 further limits claim 5 and includes the action of displaying the attributable quote in a current quote window and additional aggregate quote in an aggregate window. As described above, Gutterman does not include both a current quote window and an aggregate window. Gutterman includes a total 133 of orders at or below a price level and does not suggest including aggregate quotes. However, even if Gutterman used aggregate quotes instead of totals, the total is not displayed in an aggregate window as recited in claim 7. Instead, in Gutterman, the total is included as one of many items in the deck pane 135. As shown in FIG. 2b, Gutterman's deck pane includes both order icons 139 and order totals 133 (col. 12, lines 1-55). The order totals are disposed around the periphery of the deck pane that includes the orders such that totals for the buy orders and sell orders are displayed on opposite sides (left side and right side respectively) of the deck pane and are not displayed in a single, separate window. Thus, Gutterman does not suggest displaying the attributable quote in a current quote window and additional aggregate quote in an aggregate window as in the appellant's claim 7.

Group V (claims 8 and 9)

Appellant's claim 9 is representative of this group and includes "displaying in a first montage, the quote if it is displayable and displaying in a different portion of the montage the total aggregate quote size"

As described above, Gutterman does not include a total aggregate quote size. Gutterman displays orders (not quotes) in the incoming orders pane. Orders in the incoming orders pane include a designation of the firm placing the order. The total 133 (FIG. 2B) in Gutterman's system is for orders at or below a price level and since the orders in Gutterman's system are associated with a firm the orders are attributable. Gutterman does not suggest displaying "in a different portion of the montage the total aggregate quote size" as in the appellant's claim 9.

Group VI (claim 12)

Appellant's claim 12 is representative of this group and includes executing additional aggregate quotes and reserve quotes to any balance of the order to execute the balance of the order.

In Gutterman, if a large order cannot be filled by a single sell order, the large order is matched against multiple displayed orders as described to follow:

"In cases where the broker executes a large order through more than one counterpart order, a PARTIAL "button" and a TOTAL FILLED area are provided in the fill pane 140 shown in FIG. 2a. As described above, the PARTIAL "button" is created by the Buttons On Screen object 457, and the TOTAL FILLED window is created by the Total Filled Window object 458. After touching the order icon in the deck pane 135, the broker would touch the PARTIAL button, and the order's price and time stamp would appear in the fill pane 140, as described above, and the quantity would appear in the TOTAL FILLED area. The broker would then enter the quantity and identification codes of the counterpart broker and firm for the first order, the TOTAL FILLED amount would decrement by that quantity, and another line of information entry area would appear in the fill pane. The broker would then enter the quantity and identification codes of the counterpart broker and firm for the second order, and the TOTAL FILLED amount would decrement accordingly. Successive lines for information entry would appear in the fill pane until the broker entered orders having a total quantity equal to or greater than the large order being filled" (col. 13, line 47 to col. 14, line 2).

Thus, as described in Gutterman large orders are matched against multiple, smaller orders in the system. That is, the broker enters the quantity and identification codes of the counterpart broker and firm for the first order and thereafter enters additional orders having a total quantity equal to or greater than the large order being filled. This is substantially different from

“executing additional aggregate quotes and reserve quotes to any balance of the order to execute the balance of the order” as in the appellant’s claim 12. In Appellant’s system, execution against the aggregate and reserve quotes is performed by the system as part of an auto execution process (Appellant’s specification page14, line 18-26 ). The broker does not enter those types of orders, since the orders are either not displayed to the market as individual orders (aggregate quotes) or are invisible to the market (reserve quotes). Gutterman does not inherently possess aggregate quotes or reserve quotes, else Gutterman would have taught the person of skill in the art to execute a large order against that interest.

Group VII (claims 13, 14, and 17)

Appellant’s claim 13 is representative of this group. Claim 13 is directed to an electronic market for trading of securities. The market includes a plurality of client stations for entering quotes for securities specifying a price level and a quote size, with the quotes being quotes that are displayable and attributable to a specific market participant or additional aggregate quotes that are displayable but not attributable to a specific market participant. The market also includes a server process that receives the quotes from the clients, aggregates the quotes, and causes totals of aggregate quotes for a plurality of price levels to be displayed on the client systems.

As described above, Gutterman does not include both quotes that are displayable and attributable to a specific market participant and additional aggregate quotes that are displayable but not attributable to a specific market participant. Instead, in Gutterman all orders are displayed and the displayed orders include the firm or house that submitted the order. Hence Gutterman does not teach displayable, non-attributable orders.

Group VIII (claim 15)

Appellant’s claim 15 is representative of this group. Claim 15 is directed to an electronic market in which aggregated quotes are “displayed in a graphical user interface that includes an aggregate montage for displaying aggregate quotes at multiple price levels on either side of the market.”



Gutterman does not include such a montage. As discussed above, Gutterman includes a total 133 of orders at or below a price level and does not suggest including aggregate quotes. However, even if the Gutterman taught aggregate quotes instead of merely totaling orders at or below a price level, the total as taught by Gutterman is not displayed in an aggregate montage as recited in claim 15. Instead, the total is included as one of many items in the deck pane 135. Gutterman's deck pane includes order icons 139, column headings to identify the types of orders, a market bar 137, and order totals 133 disposed around the periphery of the deck pane (FIG. 2b, col. 12, lines 1-55). The totals for the buy orders and sell orders are displayed on opposite sides (left side and right side respectively) of the deck pane. As shown in FIG. 2b, the order totals are not included in an "aggregate montage for displaying aggregate quotes at multiple price levels on either side of the market" as in the applicant's claim. Instead, Gutterman displays the totals in two separate regions of the deck pane. This distinction is important. The aggregate montage allows the order entry to take on many forms. The aggregate montage allows order entry participants to furnish more liquidity to the market without necessarily revealing information that can adversely affect its trading interests. For instance, without aggregate interest a very large quote or order would be displayed with attribution and in effect allow traders to trade against that position, possible forcing a poorer execution than it otherwise could have received. (Appellant's specification page 2, lines 9-32, page 13, lines 20-27).

#### Group IX (claims 18 and 19)

Appellant's claim 18 is representative of this group. Claim 18 is directed to a client station for entering quotes for securities. The client station includes a display rendering a graphical user interface at which quotes can be entered at a price level. The interface includes controls to enter a quote having a size, the quote being displayable and attributable to a specific market participant, a reserve quote, having a size, the reserve quote being neither displayable nor attributable to a specific market participant, and an additional aggregate quote, having a size that is displayable but not attributable to a specific market participant.

Gutterman does not include or suggest the use of a reserve quote or an aggregate quote. Thus, it would not be obvious to include controls to enter such types of quotes as they are not used in Gutterman's system.

Group X (claims 20-23)

Appellant's claim 20 is representative of this group. Claim 20 is directed to a graphical user interface for an electronic market for trading products. The graphical user interface includes an aggregation window which displays additional aggregate quotes for a plurality of price levels of a product traded in the market, the aggregate quotes including quotes that are attributable to market participants and quotes that are displayable quotes but are not attributable to any market participants.

The graphical user interface of Gutterman, shown in FIGS. 2A-2D, does not include an aggregation window that displays the aggregate quotes including quotes that are attributable to market participants and quotes that are displayable quotes but are not attributable to any market participants. As described above, Gutterman does not include non-attributable quotes, therefore Gutterman would not further include a specialized graphical user interface having an aggregation window.

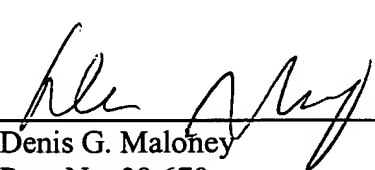
**Conclusion**

Appellant submits that claims 1-23 are allowable over Gutterman. Therefore, the Examiner erred in rejecting Appellant's claims and should be reversed.

Respectfully submitted,

Date: \_\_\_\_\_

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### **Appendix of Claims**

1. A method of managing quotes for a security, the method comprising:  
receiving from a market participant additional aggregate quotes having a size, the additional aggregate quotes being quotes that are displayable as trading interest in a security, but not being attributable to any market participant.
2. The method of claim 1 wherein receiving further comprises:  
receiving quotes from market participants that are displayable quotes and attributable to corresponding ones of the market participants.
3. The method of claim 1 wherein receiving further comprises:  
receiving quotes that are reserve quotes, which are neither displayable quotes nor attributable to market participants, but are available as trading liquidity in the security.
4. The method of claim 2 further comprising:  
determining total aggregate quote sizes of displayable quotes received from market participants.
5. The method of claim 4 wherein determining total aggregate quote size comprises:  
determining the total aggregate quote sizes by adding received quotes and additional aggregate quotes received for the security at corresponding price levels to provide the total aggregate quote sizes at each of the corresponding price levels;  
displaying the attributable quotes in an advertisement portion of a quote montage.
6. The method of claim 4 wherein determining total aggregate quote size for quotes received for the security, comprises:  
adding liked-priced quotes of the displayable and additional aggregate quote type together to provide a total aggregate quote.
7. The method of claim 5 further comprising;

displaying the attributable quote in a current quote window and additional aggregate quote in an aggregate window.

8. The method of claim 2 further comprising:  
determining if the additional aggregate quotes and displayable quotes are proprietary or agency quotes;  
determining a total of all agency quotes and proprietary quotes; and  
displaying a total of all agency quotes and a total of all aggregate quotes, which includes the total agency quotes and proprietary quotes.

9. The method of claim 1 further comprising:  
determining if the quote is a displayable or additional aggregate quote type;  
adding the quote to all other quotes of the marketable and additional aggregate quote types at price levels of the quote to provide a total aggregate quote size at the price levels;  
displaying in a first montage, the quote if it is displayable; and  
displaying in a different portion of the montage the total aggregate quote size .

10. The method of claim 1 further comprising;  
receiving a reserve quote.

11. The method of claim 3 further comprising:  
receiving an order; and  
executing the order against a quote.

12. The method of claim 11 wherein executing further comprises:  
executing additional aggregate quotes and reserve quotes to any balance of the order to execute the balance of the order.

13. An electronic market for trading of securities, the market comprising:

a plurality of client stations for entering quotes for securities specifying a price level and a quote size, with the quotes being quotes that are displayable and attributable to a specific market participant or additional aggregate quotes that are displayable but not attributable to a specific market participant; and

a server process that receives the quotes from the clients, aggregates the quotes and causes totals of aggregate quotes for a plurality of price levels to be displayed on the client systems.

14. The electronic market of claim 13 wherein at client stations quotes can be entered at a price level a quote size that are reserve quotes that are neither displayable nor attributable to a specific market participant.

15. The electronic market of claim 13 wherein the aggregated quotes are displayed in a graphical user interface that includes an aggregate montage for displaying aggregate quotes at multiple price levels on either side of the market.

16. The electronic market of claim 13 wherein the aggregated quotes are displayed as total aggregated interest and agency interest.

17. The electronic market of claim 13 wherein quotes attributable to a specific market participant and are displayed in a current quote montage, disposed adjacent to the aggregate quote montage.

18. A client station for entering quotes for securities, the client station comprising:  
a display rendering a graphical user interface at which quotes can be entered at a price level, said interface comprising controls to enter:

a quote having a size, the quote being displayable and attributable to a specific market participant, a reserve quote, having a size, the reserve quote being neither displayable nor attributable to a specific market participant, and an additional aggregate quote, having a size that is displayable but not attributable to a specific market participant.

19. The station of claim 18 wherein the interface is an aggregation montage and, the interface further includes a current quote montage for displaying attributable quotes.

20. A graphical user interface for an electronic market for trading products, the graphical user interface comprising:

an aggregation window which displays additional aggregate quotes for a plurality of price levels of a product traded in the market, the aggregate quotes including quotes that are attributable to market participants and quotes that are displayable quotes but are not attributable to any market participants.

21. The graphical user interface of claim 20 further comprising a current quote window disposed adjacent the aggregation window.

22. The graphical user interface of claim 20 further comprising:  
a current quote window disposed adjacent the aggregation window and wherein said current quote window displays current displayable quotes of participants in the system.

23. The graphical user interface of claim 20 further comprising:  
a current quote window disposed adjacent the aggregate window and wherein said current quote window displays current displayable quotes of participants in the electronic market, and further comprises:

a quote that represents total aggregate quotes at a current market level displayed in the aggregation window.